What is claimed is:

1. A method for providing assistance to a position receiver in a location system consisting of a Global Navigation Satellite System (GNSS) and a synchronized network of positioning-unit devices, said synchronized network of positioning-unit devices providing synchronized network time and synchronized network frequency, the method comprising:

a) processing Global Navigation Satellite System (GNSS) signals at a positioning-unit device to determine assistance data, including:

i) the time-of-arrival of Global Navigation Satellite System (GNSS) signals relative to said synchronized network time, and;

ii) the frequency of Global Navigation Satellite System (GNSS) signals relative to said synchronized network frequency;

b) incorporating said determined assistance data in a positioning signal transmitted by said positioning unit device;

c) analyzing said positioning signal at said position receiver to:

i) extract said determined assistance data, and

ii) determine said synchronized network time and said synchronized network frequency;

d) searching for Global Navigation Satellite System (GNSS) signals at said position receiver in a range responsive to said extracted assistance data, and said determined synchronized network time and said synchronized network frequency.

2. The method of claim 1, wherein said determined synchronized network time includes a relative received time offset of said positioning-unit device.

3. The method of claim 1, wherein said determined synchronized network time is derived from the calculation of a position, velocity, time (PVT) solution at said position receiver from said synchronized network of positioning-unit devices.

4. The method of claim 1, wherein said assistance data further includes a time offset between Global Navigation Satellite System (GNSS) system time and said synchronized network time.

5. The method of claim 1, wherein said assistance data further includes a frequency offset between Global Navigation Satellite System (GNSS) system frequency and said synchronized network frequency.

6. The method of claim 1, wherein said assistance data further includes satellite orbit information of said Global Navigation Satellite System (GNSS).

7. The method of claim 1, wherein said assistance data further includes a frequency rate of said Global Navigation Satellite System (GNSS) signals.

8. The method of claim 1, wherein said assistance data further includes a frequency acceleration of said Global Navigation Satellite System (GNSS) signals.

9. A method for providing assistance to a position receiver in a location system consisting of a Global Navigation Satellite System (GNSS) and a synchronized network of positioning-unit devices, said synchronized network of positioning-unit devices providing synchronized network time, the method comprising:

a) processing Global Navigation Satellite System (GNSS) signals at a positioning-unit device to determine assistance data including the time-of-arrival of Global Navigation Satellite System (GNSS) signals relative to said synchronized network time;

b) incorporating said determined assistance data in a positioning signal transmitted by said positioning unit device;

c) analyzing said positioning signal at said position receiver to:

i) extract said determined assistance data, and

ii) determine said synchronized network time;

d) searching for Global Navigation Satellite System (GNSS) signals at said position receiver in a range responsive to said extracted assistance data, and said determined synchronized network time.

10. The method of claim 9, wherein said determined synchronized network time includes a relative received time offset of said positioning-unit device.

11. The method of claim 9, wherein said determined synchronized network time is derived from the calculation of a position, velocity, time (PVT) solution at said position receiver from said synchronized network of positioning-unit devices.

12. The method of claim 9, wherein said assistance data further includes a time offset between Global Navigation Satellite System (GNSS) system time and said synchronized network time.

13. The method of claim 9, wherein said assistance data further includes satellite orbit information of said Global Navigation Satellite System (GNSS).

14. A method for providing assistance to a position receiver in a location system consisting of a Global Navigation Satellite System (GNSS) and a synchronized network of positioning-unit devices, said synchronized network of positioning-unit devices providing synchronized network frequency, the method comprising:

a) processing Global Navigation Satellite System (GNSS) signals at a positioning-unit device to determine assistance data including the frequency of Global Navigation Satellite System (GNSS) signals relative to said synchronized network frequency;

b) incorporating said determined assistance data in a positioning signal transmitted by said positioning unit device;

c) analyzing said positioning signal at said position receiver to:

i) extract said determined assistance data, and

ii) determine said synchronized network frequency;

d) searching for Global Navigation Satellite System (GNSS) signals at said position receiver in a range responsive to said extracted assistance data and said determined synchronized network frequency.

15. The method of claim 14, wherein said assistance data further includes a frequency offset between Global Navigation Satellite System (GNSS) system frequency and said synchronized network frequency.

16. The method of claim 14, wherein said assistance data further includes satellite orbit information of said Global Navigation Satellite System (GNSS).

17. The method of claim 14, wherein said assistance data further includes a frequency rate of said Global Navigation Satellite System (GNSS) signals.

18. The method of claim 14, wherein said assistance data further includes a frequency acceleration of said Global Navigation Satellite System (GNSS) signals.